

SEQUENCE LISTING

<110> BISHOP-HURLEY, SHARON L.
 SCHMIDT, FRANCIS J.
 SMITH, ARNOLD L.

<120> PHAGE-DISPLAY PEPTIDES AS NOVEL ANTIMICROBIAL AGENTS
 AGAINST HAEMOPHILUS INFLUENZAE

<130> UVMO:022US

<140> UNKNOWN
 <141> 2003-09-04

<150> 60,409,909
 <151> 2002-09-11

<160> 8

<170> PatentIn Ver. 2.1

<210> 1
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Peptide

<400> 1
 Ile Thr Phe Thr Gly
 1 5

<210> 2
 <211> 19
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Peptide

<400> 2
 Ala Cys Gly Gly Ala Cys Ala Gly Ala Thr Gly Cys Ala Gly Ala Thr
 1 5 10 15
 Thr Gly Gly

<210> 3
 <211> 22
 <212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 3

Cys Cys Gly Ala Gly Gly Cys Cys Ala Gly Thr Thr Gly Ala Gly Ala
1 5 10 15

Thr Cys Ala Gly Thr Cys
20

<210> 4

<211> 333

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 4

Ala Glu Thr His Val Thr Gly Gly Ser Ala Gly His Thr Val Ser Gly
1 5 10 15

Phe Val Ser Leu Leu Ala Pro Gly Ala Lys Gln Asn Val Gln Leu Ile
20 25 30

Asn Thr Asn Gly Ser Trp His Leu Asn Ser Thr Ala Leu Asn Cys Asn
35 40 45

Asp Ser Leu Asn Thr Gly Trp Leu Ala Gly Leu Phe Tyr His His Lys
50 55 60

Phe Asn Ser Ser Gly Cys Pro Glu Arg Leu Ala Ser Cys Arg Pro Leu
65 70 75 80

Thr Asp Phe Asp Gln Gly Trp Gly Pro Ile Ser Tyr Ala Asn Gly Ser
85 90 95

Gly Pro Asp Gln Arg Pro Tyr Cys Trp His Tyr Pro Pro Lys Pro Cys
100 105 110

Gly Ile Val Pro Ala Lys Ser Val Cys Gly Pro Val Tyr Cys Phe Thr
115 120 125

Pro Ser Pro Val Val Val Gly Thr Thr Asp Arg Ser Gly Ala Pro Thr
130 135 140

Tyr Ser Trp Gly Glu Asn Asp Thr Asp Val Phe Val Leu Asn Asn Thr
145 150 155 160

Arg Pro Pro Leu Gly Asn Trp Phe Gly Cys Thr Trp Met Asn Ser Thr

	165		170		175
Gly Phe Thr Lys Val Cys Gly Ala Pro Pro Cys Val Ile Gly Gly Ala					
	180		185		190
Gly Asn Asn Thr Leu His Cys Pro Thr Asp Cys Phe Arg Lys His Pro					
	195		200		205
Asp Ala Thr Tyr Ser Arg Cys Gly Ser Gly Pro Trp Ile Thr Pro Arg					
	210		215		220
Cys Leu Val Asp Tyr Pro Tyr Arg Leu Trp His Tyr Pro Cys Thr Ile					
	225		230		235
Asn Tyr Thr Ile Phe Lys Ile Arg Met Tyr Val Gly Gly Val Glu His					
	245		250		255
Arg Leu Glu Ala Ala Cys Asn Trp Thr Arg Gly Glu Arg Cys Asp Leu					
	260		265		270
Glu Asp Arg Asp Arg Ser Glu Leu Ser Pro Leu Leu Leu Thr Thr Thr					
	275		280		285
Gln Trp Gln Val Leu Pro Cys Ser Phe Thr Thr Leu Pro Ala Leu Ser					
	290		295		300
Thr Gly Leu Ile His Leu His Gln Asn Ile Val Asp Val Gln Tyr Leu					
	305		310		315
Tyr Gly Val Gly Ser Ser Ile Ala Ser Trp Ala Ile Lys					
	325		330		

<210> 5
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic Peptide

<400> 5
 Ala Ser Pro Thr Tyr Arg Leu Tyr Ser Ala Ser Pro Ala Ser Pro Ala
 1 5 10 15
 Ser Pro Ala Ser Pro Leu Tyr Ser
 20

<210> 6
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 6

Gly Ser Arg Gly Lys His Thr Phe Val Arg Pro Thr Leu Val Phe
1 5 10 15

<210> 7

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 7

Phe Ile Ser Tyr Ser Ser Pro Ser His Met Gly Ala Arg Met Arg
1 5 10 15

<210> 8

<211> 43

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 8

Ala Ala Thr Thr Thr Ala Ala Thr Ala Cys Gly Ala Cys Thr Cys Ala
1 5 10 15

Cys Thr Ala Thr Ala Gly Gly Cys Ala Ala Ala Cys Gly Ala Cys Thr
20 25 30

Gly Thr Cys Cys Thr Gly Gly Cys Cys Gly Thr
35 40

SEQUENCE LISTING

<110> BISHOP-HURLEY, SHARON L.
 SCHMIDT, FRANCIS J.
 SMITH, ARNOLD L.

<120> PHAGE-DISPLAY PEPTIDES AS NOVEL ANTIMICROBIAL AGENTS
 AGAINST HAEMOPHILUS INFLUENZAE

<130> UVMO:022US

<140> UNKNOWN

<141> 2003-09-04

<150> 60,409,909

<151> 2002-09-11

<160> 8

<170> PatentIn Ver. 2.1

<210> 1

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 Peptide

<400> 1

Ile Thr Phe Thr Gly
 1 5

<210> 2

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 Peptide

<400> 2

Ala Cys Gly Gly Ala Cys Ala Gly Ala Thr Gly Cys Ala Gly Ala Thr
 1 5 10 15

Thr Gly Gly

<210> 3

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 3

Cys Cys Gly Ala Gly Gly Cys Cys Ala Gly Thr Thr Gly Ala Gly Ala
1 5 10 15

Thr Cys Ala Gly Thr Cys
20

<210> 4

<211> 333

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 4

Ala Glu Thr His Val Thr Gly Gly Ser Ala Gly His Thr Val Ser Gly
1 5 10 15

Phe Val Ser Leu Leu Ala Pro Gly Ala Lys Gln Asn Val Gln Leu Ile
20 25 30

Asn Thr Asn Gly Ser Trp His Leu Asn Ser Thr Ala Leu Asn Cys Asn
35 40 45

Asp Ser Leu Asn Thr Gly Trp Leu Ala Gly Leu Phe Tyr His His Lys
50 55 60

Phe Asn Ser Ser Gly Cys Pro Glu Arg Leu Ala Ser Cys Arg Pro Leu
65 70 75 80

Thr Asp Phe Asp Gln Gly Trp Gly Pro Ile Ser Tyr Ala Asn Gly Ser
85 90 95

Gly	Pro	Asp	Gln	Arg	Pro	Tyr	Cys	Trp	His	Tyr	Pro	Pro	Lys	Pro	Cys	100	105	110
Gly	Ile	Val	Pro	Ala	Lys	Ser	Val	Cys	Gly	Pro	Val	Tyr	Cys	Phe	Thr	115	120	125
Pro	Ser	Pro	Val	Val	Val	Gly	Thr	Thr	Asp	Arg	Ser	Gly	Ala	Pro	Thr	130	135	140
Tyr	Ser	Trp	Gly	Glu	Asn	Asp	Thr	Asp	Val	Phe	Val	Leu	Asn	Asn	Thr	145	150	155
Arg	Pro	Pro	Leu	Gly	Asn	Trp	Phe	Gly	Cys	Thr	Trp	Met	Asn	Ser	Thr	165	170	175
Gly	Phe	Thr	Lys	Val	Cys	Gly	Ala	Pro	Pro	Cys	Val	Ile	Gly	Gly	Ala	180	185	190
Gly	Asn	Asn	Thr	Leu	His	Cys	Pro	Thr	Asp	Cys	Phe	Arg	Lys	His	Pro	195	200	205
Asp	Ala	Thr	Tyr	Ser	Arg	Cys	Gly	Ser	Gly	Pro	Trp	Ile	Thr	Pro	Arg	210	215	220
Cys	Leu	Val	Asp	Tyr	Pro	Tyr	Arg	Leu	Trp	His	Tyr	Pro	Cys	Thr	Ile	225	230	235
Asn	Tyr	Thr	Ile	Phe	Lys	Ile	Arg	Met	Tyr	Val	Gly	Gly	Val	Glu	His	245	250	255
Arg	Leu	Glu	Ala	Ala	Cys	Asn	Trp	Thr	Arg	Gly	Glu	Arg	Cys	Asp	Leu	260	265	270
Glu	Asp	Arg	Asp	Arg	Ser	Glu	Leu	Ser	Pro	Leu	Leu	Leu	Thr	Thr	Thr	275	280	285
Gln	Trp	Gln	Val	Leu	Pro	Cys	Ser	Phe	Thr	Thr	Leu	Pro	Ala	Leu	Ser	290	295	300
Thr	Gly	Leu	Ile	His	Leu	His	Gln	Asn	Ile	Val	Asp	Val	Gln	Tyr	Leu	305	310	315
Tyr	Gly	Val	Gly	Ser	Ser	Ile	Ala	Ser	Trp	Ala	Ile	Lys				325	330	

<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 5
Ala Ser Pro Thr Tyr Arg Leu Tyr Ser Ala Ser Pro Ala Ser Pro Ala
1 5 10 15
Ser Pro Ala Ser Pro Leu Tyr Ser
20

<210> 6
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 6
Gly Ser Arg Gly Lys His Thr Phe Val Arg Pro Thr Leu Val Phe
1 5 10 15

<210> 7
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 7
Phe Ile Ser Tyr Ser Ser Pro Ser His Met Gly Ala Arg Met Arg
1 5 10 15

<210> 8
<211> 43
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 8

Ala Ala Thr Thr Thr Ala Ala Thr Ala Cys Gly Ala Cys Thr Cys Ala
1 5 10 15

Cys Thr Ala Thr Ala Gly Gly Cys Ala Ala Ala Cys Gly Ala Cys Thr
20 25 30

Gly Thr Cys Cys Thr Gly Gly Cys Cys Gly Thr
35 40